

**IN THE UNITED STATES BANKRUPTCY COURT
FOR THE DISTRICT OF DELAWARE**

In re:

FTX TRADING LTD., *et al.*,¹

Debtors.

Chapter 11

Case No. 22-11068 (JTD)

(Jointly Administered)

**Ref. Nos. 5202, 5203, 5204, 5601, 7090, 8923,
8949, 8950, 8951**

**DEBTORS' OMNIBUS SUPPLEMENTAL REPLY IN SUPPORT OF MOTION OF
DEBTORS TO ESTIMATE CLAIMS BASED ON DIGITAL ASSETS**

¹ The last four digits of FTX Trading Ltd.'s and Alameda Research LLC's tax identification number are 3288 and 4063 respectively. Due to the large number of debtor entities in these Chapter 11 Cases, a complete list of the Debtors and the last four digits of their federal tax identification numbers is not provided herein. A complete list of such information may be obtained on the website of the Debtors' claims and noticing agent at <https://cases.ra.kroll.com/FTX>. The principal place of business of Debtor Emergent Fidelity Technologies Ltd is Unit 3B, Bryson's Commercial Complex, Friars Hill Road, St. John's, Antigua and Barbuda.

TABLE OF CONTENTS

	<u>Page</u>
PRELIMINARY STATEMENT	1
RELEVANT BACKGROUND	5
A. These Chapter 11 Cases	5
B. The Motion, Hearing and Schedule	7
C. The Deferred Digital Assets.....	10
i. MAPS and OXY	10
ii. SRM	12
iii. Sam Coins	13
REPLY	14
I. The Court Has Wide Discretion to Determine Appropriate Estimation Methodology	14
A. The Court Has Already Ruled That Estimation Is Appropriate.....	14
B. The Filing of a Proof of Claim is Not “ <i>Prima Facie</i> ” Evidence of a Valid Claim in an Estimation Proceeding.....	14
C. It is Appropriate to Include the Debtors’ Holdings When Determining the Value of Digital Assets.	16
II. The Debtors’ Experts Are Qualified Under Federal Rule of Evidence 702 and Otherwise	19
A. Professor Howell is Well Qualified.	20
i. Professor Howell Has Extensive Qualifications to Offer an Opinion on the Valuation of Digital Assets	20
ii. Maps’ Attacks on Professor Howell’s Qualifications Are Unsupported.....	21
iii. TMSI’s Attempt to Re-characterize the Issue on Which Professor Howell is Opining Fails	21
B. Mr. Lu is Well Qualified.....	22

i.	Mr. Lu's Professional Experience in Data and Pricing Digital Assets is Extensive.....	22
ii.	Maps' Attacks on Mr. Lu's Qualifications Are Unsupportable.....	24
III.	The Baseline Prices Determined by Mr. Lu Are Reasonable and Reliable.....	25
IV.	Professor Howell's Methodologies and the Resulting Discounts Are Reasonable and Reliable	28
A.	Professor Howell's Asset Liquidation Discounts Are Reasonable.....	29
i.	Professor Howell's Use of the KO Model is Well-Founded	30
ii.	Professor Howell's Inputs and Assumptions to the KO Model are Appropriate	33
iii.	Professor Howell Properly Excluded Perpetual Futures Markets Volumes From Her Dataset	36
iv.	The Results of the KO Model with Respect to MAPS, SRM and OXY are Accurate and Reliable	37
B.	Professor Howell's DLOMs are Reasonable.....	38
i.	Professor Howell's DLOM Methodology is Reliable	38
ii.	Professor Howell's Application of an Asset Liquidation Discount and DLOM to MAPS, OXY and SRM is Appropriate	39
V.	No Party Has Provided A Viable Alternative to the Debtors' Proposed Values for MAPS, OXY or SRM.	40
A.	Mr. Konstantinidis Is Not Qualified.	40
B.	Mr. Konstantinidis Does Not Provide Values That Can Be Used to Estimate Claims.	41
C.	Mr. Konstantinidis' Methodology is Fundamentally Flawed.	42
i.	Mr. Konstantinidis' Methodology Incorrectly Applies an Unsupported and Arbitrary Assumption Regarding How Much of a Digital Asset Can Be Liquidated Into the Market Without Price Impact	43
ii.	Mr. Konstantinidis Uses Unreliable Trading Data and an Arbitrary Estimation Period as the Basis for His Volume Assumptions.....	44

iii.	There Is No Basis for Mr. Konstantinidis' Volume Growth Projections.....	46
VI.	The Initial Boba Objection Must Be Overruled.....	48
	CONCLUSION.....	49

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>APEX Fin. Options, LLC v. Gilbertson,</i> 2022 WL 613347 (D. Del. Mar. 1, 2022)	22
<i>Bittner v. Borne Chem. Co., Inc.</i> , 691 F.2d 134 (3d Cir. 1982).....	15
<i>Hammond v. Int'l Harvester Co.</i> , 691 F.2d 646 (3d Cir. 1982).....	19
<i>In re G-I Holdings, Inc.</i> , 323 B.R. 583 (Bankr. D.N.J. 2005)	15
<i>In re Henry</i> , 546 B.R. 633 (Bankr. E.D. Pa. 2016)	14
<i>In re Innovasystems, Inc.</i> , 2014 WL 7235527 (Bankr. D.N.J. Dec. 18, 2014)	15
<i>In re Oakwood Homes</i> , 449 F.3d 588 (3d Cir. 2006).....	18
<i>In re Paoli</i> , 35 F.3d 717 (2d Cir. 1994).....	19
<i>Kool, Mann, Coffee & Co. v. Coffey</i> , 300 F.3d 340 (3d Cir. 2002).....	15
<i>MiiCs & Partners, Inc. v. Funai Elec. Co.</i> , 2017 WL 6268072 (D. Del. Dec. 7, 2017).....	22
<i>Pineda v. Ford Motor Co.</i> , 520 F.3d 237 (3d Cir. 2008).....	19-20
<i>Schneider v. Fried</i> , 320 F.3d 396 (3d Cir. 2003).....	19
<i>Winn-Dixie Stores, Inc. v. E. Mushroom Mktg. Coop.</i> , 2021 WL 2352016 (E.D. Pa. June 9, 2021)	22
Statutes	
11 U.S.C. § 502(c)	7, 8, 14, 41

Fed. R. Evid. 70219, 22

Other Authorities

Albert S. Kyle & Anna A. Obizhaeva, <i>Market Microstructure Invariance: Empirical Hypotheses</i> , 84 ECONOMETRICA 1345 (2016).....	29
Albert S. Kyle and Anna A. Obizhaeva, <i>Large Bets and Stock Market Crashes</i> , 27 R. FIN. 2163 (2023).....	31, 43
Alexander Brauneis, et al., <i>How to Measure the Liquidity of Cryptocurrency Markets?</i>	31
COLLIER ON BANKRUPTCY ¶ 748.02.....	19
Matthew Hougan, Hong Kim, Micah Lerner, <i>Economic and Non-Economic Trading in Bitcoin: Exploring the Real Spot Market for the World's First Digital Commodity</i> , BITWISE ASSET MANAGEMENT (May 24, 2019).....	44, 45

FTX Trading Ltd. and its affiliated debtors and debtors-in-possession (collectively, the “Debtors”) hereby submit this supplemental reply (the “Reply”) in support of the *Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. 5202] (the “Motion”)² and in response to the objections to the Motion (the “Objections”) filed by Boba Foundation [D.I. 5601], TMSI SEZC Ltd. (“TMSI”) [D.I. 8923], Fondation Serendipity, Fondation Elements, Serendipity Network Ltd and Liquidity Network Ltd (collectively, “Oxy”) [D.I. 8949], and Maps Vault Limited (“Maps”) [D.I. 8951], and the joinder filed by Lavanda Sands, L.L.C. [D.I. 8950] (“Lavanda Sands” and together with Boba Foundation, TMSI, Oxy and Maps, the “Objectors”). Each of the Objections should be overruled, the Motion should be granted with respect to the MAPS, OXY, SRM, and BOBA tokens (the “Deferred Digital Assets”), and the supplemental order attached hereto as Exhibit A (the “Supplemental Order”) should be entered with the updated version of the Digital Assets Conversion Table.

PRELIMINARY STATEMENT

1. The Court determined at the January 31, 2024 evidentiary hearing that the millions of creditor Claims based on Digital Assets in these Chapter 11 Cases are unliquidated, and that it is appropriate to estimate the value of those Claims. (Jan. 31, 2024 Hr’g Tr. 130:22-23; 131:17-19.) At that hearing, the Court also received testimony and written opinions from the Debtors’ experts, Kevin Lu of Coin Metrics and Sabrina Howell of NYU Stern School of Business, credited that evidence, and concluded that the Debtors’ “methodology for estimating the claims is fair and reasonable.” (*Id.* at 131:17-21.)

2. The Debtors need estimated values of Claims based on Digital Assets for multiple purposes, including Plan solicitation and voting, setting appropriate reserves, and

² Capitalized terms not otherwise defined herein are to be given the meanings ascribed to them in the Motion.

making distributions. The original Digital Assets Conversion Table annexed to the Court's order provides those prices for all but four tokens (plus locked variants) out of the Debtors' 1,321 unique Digital Assets. The Debtors agreed to defer the valuation of the MAPS, OXY, SRM, and BOBA tokens to permit the Objectors to pursue discovery.

3. The Debtors' experts applied the same methodology and analysis to the MAPS, OXY, SRM, and BOBA tokens as they did to all of the other Digital Assets. Mr. Lu selected high quality constituent markets and applied sound statistical techniques to calculate an accurate market price for each Deferred Digital Asset at the Petition Time. Professor Howell then applied her well-reasoned methodology to determine the appropriate Asset Liquidation Discount and DLOM, as necessary.

4. Maps and Oxy are quick to paint themselves as "victims" of the Debtors and Samuel Bankman-Fried even though, in reality, Alameda's balance sheet holdings of MAPS, OXY and SRM played a large role in Mr. Bankman-Fried's fraud. It is the nature of those Digital Assets and resulting massive size of the Debtors' holdings in them, however, that affect their value when estimating Claims based on the Deferred Digital Assets.

5. The close ties each of the Deferred Digital Assets had to the Debtors and Samuel Bankman-Fried resulted in over 95 percent of the maximum supply of each of MAPS, OXY, and SRM being in the Debtors' possession on the Petition Date. As a result, the Debtors held amounts of the Deferred Digital Assets far exceeding what the market could absorb and representing hundreds or thousands of times the daily trading volumes at a time the Debtors' estates needed to liquidate their assets in order to maximize value to satisfy customer and other creditor Claims as of the Petition Date.

6. The result is that, unsurprisingly, the Asset Liquidation Discount calculated using the Debtors' reasonable methodology is high—100% for MAPS and OXY and 58.3% for SRM—reflecting the extreme illiquidity of those tokens and the inability of their holders to realize value from them. This is the appropriate result because the value of the Deferred Digital Assets cannot be determined in a vacuum as if there is no other FTX-related trading activity happening at the same time. The alternative would be that other creditors whose Claims are based on more liquid Digital Assets would be subsidizing recoveries of creditors whose Claims are based on the more illiquid MAPS, OXY, and SRM. This would be unfair and inequitable.

7. Most of the creditors holding Claims based on the Deferred Digital Assets accepted this reality. But a small number of Objectors whose holdings were concentrated in these illiquid tokens seek to force a different result that siphons hundreds of millions of dollars in value to them at the expense of other creditors. Maps and Oxy not only seek a higher estimated value for Claims based on MAPS, OXY, and SRM, but orchestrate a wholesale attack on the process, the qualifications of the Debtors' experts, their methodologies, and their results. Their litany of arguments made in desperation have no merit and should be rejected.

8. Notably, each of the Objectors agree that it is appropriate to discount the Petition Time prices for MAPS, OXY, and SRM to some degree. *None* of the Objectors' experts offers an opinion that supports valuing these Digital Assets at Petition Time prices. The disagreement is how to calculate the necessary discounts and what discount should ultimately be applied. The Debtors' methodology and results are reasonable, and treat all creditors the most fairly.

9. The conflicting valuation methodologies and results offered by the Objectors are incompatible with one another, do not provide a discount or value generally applicable for the Deferred Digital Assets to be inserted into the Digital Assets Conversion Table, and demonstrate the self-serving nature of their analyses. For example, Maps and Oxy assert that the Debtors must calculate a different discount for each individual customer based on that customer's specific holdings, seeking to end-run around the Court's decision rejecting their request for an individual claims objection process. In contrast, TMSI advocates for the Asset Liquidation Discount to be calculated across all creditors based only on the amount of the aggregate creditor Claims while ignoring the Debtors' holdings of the token.

10. Furthermore, TMSI does not object to the application of the Debtors' DLOM to its SRM tokens, while MAPS and OXY argue that no DLOM should be applied in addition to the Asset Liquidation Discount. TMSI objects to the calculation of the Asset Liquidation Discount for Claims based on SRM but *not* to the 100% discount for their own Claims based on MAPS and OXY—the primary focus of the Maps and Oxy Objections.

11. The result is an unworkable and unreliable set of proposed discounts, each developed to result in the highest possible estimated Claim amount for the relevant Objector, as detailed in the following chart.

Objector	Digital Asset		
	MAPS	OXY	SRM
Maps	45.4% discount for Maps Vault Limited only	36.9% discount for Oxygen Vault Limited only	46.0% for Maps Vault Limited only 45.9% for Oxygen Vault Limited only
Oxy	43.2% discount for Fondation Serendipity only	36.4% discount for Fondation Elements only 35.8% discount for Fondation Serendipity only	N/A
TMSI	100%*	100%*	12.47% asset liquidation discount <i>and</i> applicable DLOM**

* denotes the relevant Objector did not object to the Debtors' proposed discount for that Deferred Digital Asset

** denotes TMSI did not object to application of Debtors' DLOM to SRM

12. The Court should overrule the remaining Objections and approve the Debtors' estimation of the value of Claims based on each of the Deferred Digital Assets in accordance with the same methodology used for all other creditor Claims based on all other Digital Assets, with prices as set forth in the updated Digital Asset Conversion Table.

RELEVANT BACKGROUND

A. These Chapter 11 Cases

13. As the Court is aware, the Customer Bar Date Order, entered on June 28, 2023, set a deadline of September 29, 2023 for customers to file proofs of claim on account of Customer Entitlement Claims. As set forth in the Customer Bar Date Notice, each customer proof of claim based on cryptocurrencies or digital assets was only required to set forth (i) the number of units or quantity of each cryptocurrency or digital asset and (ii) the program, if any, applicable to each cryptocurrency or digital asset. The proof of claim form did not contemplate holders of Customer Entitlement Claims providing a dollar valuation for any of the cryptocurrencies or digital assets. Accordingly, Claims based on Digital Assets are currently scheduled or asserted in proofs of claim only in Digital Asset quantities without dollarized values. The Customer Bar Date Notice expressly noted that the customers were "not to include any conversions or valuations" and that the "Debtors [would] seek to establish valuations at a later date" with respect to such cryptocurrencies and Digital Assets. (Customer Bar Date Notice n.3.)³

³ Certain of the Objectors continue to insist that their Claims are liquidated because they included dollarized values in their proofs of claim. (See Maps Obj. ¶ 13; Oxy Obj. ¶ 15.) As the Court determined at the Hearing (as defined below), Claims based on Digital Assets are unliquidated notwithstanding certain parties' attempt to include their own dollar conversion rates. (Jan. 31, 2024 Hr'g Tr. 130:22-131:1.)

14. On September 13, 2023, the Court entered the *Order Authorizing and Approving (I) Guidelines for the Sale or Transfer of Certain Digital Assets, (II) the Sale or Transfer of Such Digital Assets in Accordance with Such Guidelines Free and Clear of any Liens, Claims, Interests and Encumbrances, (III) the Debtors' Entry into, and Performance Under, Postpetition Hedging Arrangements, Including Granting Liens and Superpriority Administrative Expense Claims in Connection Therewith and (IV) the Debtors to Stake Certain Digital Assets* [D.I. 2505] (the “Digital Assets Sale Order”). Among other things, the Digital Assets Sale Order granted the Debtors’ coin monetization motion and authorized them to execute sales of, and transactions in, certain Digital Assets in anticipation of dollarized distributions to creditors.

15. Also on September 13, 2023, the Court entered the *Order Authorizing FTX Trading Ltd. to Enter into, and Perform its Obligations Under, the Investment Services Agreement* [D.I. 2504] (the “IMA Order”). The IMA Order authorized the Debtors to enter into an agreement with Galaxy Asset Management, pursuant to which Galaxy Asset Management acts as investment manager for the Debtors’ estate with respect to certain sales and transactions in Digital Assets. The Debtors, with the assistance of Galaxy Asset Management, have been engaging in such sales and transactions in accordance with the Digital Assets Sale Order to monetize Digital Assets and prepare for dollarized distributions to creditors.

16. On December 16, 2023, the Debtors filed their (i) Plan, (ii) Disclosure Statement and (iii) Solicitation Procedures Motion. The Debtors expect to file a further amended Plan and Disclosure Statement soon. Both the current Plan and the amended Plan to be filed provide for dollarized distributions to creditors on account of Claims based on Digital Assets valued as of the Petition Date.

B. The Motion, Hearing and Schedule

17. On December 27, 2023, the Debtors filed the Motion. Pursuant to the Motion, the Debtors requested entry of an order estimating Claims on account of Digital Assets and fiat currency based on the values set forth in the Digital Assets Conversion Table. As explained above and in the Motion, millions of the Claims submitted and listed on the Debtors' Schedules are based on Digital Assets, and asserted in quantities of Digital Assets rather than U.S. Dollars. (Mot. ¶ 1.) The liquidation of every individual Claim in respect of a Digital Asset would be impractical and unduly delay these Chapter 11 Cases. (*Id.* at ¶ 2.) Accordingly, the Debtors sought to estimate these Claims pursuant to section 502(c) of the Bankruptcy Code based on values proposed by the Debtors for each Digital Asset.

18. On January 11, 2024, in response to the Motion, (i) Boba Foundation filed the *Opposition of Boba Foundation to Motion of Debtors to Estimate Claims Based on Digital Assets and Request for Continued Hearing* [D.I. 5601] (the “Initial Boba Objection”), (ii) Oxy filed the *Preliminary Objection of Fondation Serendipity, Fondation Elements, Serendipity Network LTD and Liquidity Network Ltd to the FTX Debtors’ Motion to Estimate Claims Based on Digital Assets* [D.I. 5617] (the “Initial Oxy Objection”), (iii) Maps filed the *Preliminary Objection of Maps Vault Limited to Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. 5620] (the “Initial Maps Objection”), (iv) Lavanda Sands filed *Lavanda Sands, L.L.C.’s Joinder in Preliminary Objection of Fondation Serendipity, Fondation Elements, Serendipity Network LTD and Liquidity Network LTD to the FTX Debtors’ Motion to Estimate Claims Based on Digital Assets* [D.I. 5624] (the “Initial Lavanda Sands Joinder”)⁴ and (v) TMSI

⁴ Because Lavanda Sands joined the Initial Oxy Objection and the Oxy Objection, references to Oxy and responses to arguments raised by Oxy shall also refer to, and be in response to, Lavanda Sands.

filed the *Limited Objection of TMSI SEZC Ltd. to Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. 5626] (the “Initial TMSI Objection”). Among other things, Boba Foundation, Maps, and Oxy argued in their initial objections that the Debtors had not established that estimation was necessary under section 502(c) of the Bankruptcy Code. (*See* Initial Boba Obj. ¶¶ 39-47; Initial Oxy Obj. ¶¶ 19-25; Initial Maps Obj. ¶¶ 35-38.)

19. On January 28, 2024, the Debtors filed the *Omnibus Reply in Support of Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. 6728] (the “Original Reply”), which attached as Exhibit D the *Supplemental Declaration of Sabrina T. Howell in Support of Motion to Estimate Claims Based on Digital Assets* (the “Howell Supplemental Declaration”).

20. On January 31, 2024, the Court held a hearing (the “Hearing”) on the Motion. At the Hearing, the Debtors presented evidence from experts Sabrina T. Howell and Kevin Lu, as well as from Edgar Mosley III of Alvarez & Marsal. Also at the Hearing, Oxy and Maps further argued that section 502(c) was inapplicable to their Claims. (*See, e.g.*, Jan. 31, 2024 Hr’g Tr. 104:4-13; 113:23-115:8.) Oxy specifically requested exemption from estimation and asked the Court that they be given “that opportunity to have the regular claims hearing.” (*Id.* at 110:5-9; 110:25-111:2; 112:16-21.)

21. The Court “disagree[d]” with the arguments “that estimation [is] unnecessary under 502(c) because the value of the claims could be determined through the claim allowance process without undue delay.” (*Id.* at 130:9-12.) To the contrary, the Court found that “[a]n evaluation and conversion to U.S. dollars using an allowance process would take an inordinate amount of time.” (*Id.* at 130:13-15.) The Court went on to consider and overrule dozens of objections to the Motion from represented and *pro se* parties, and granted the Motion.

In doing so, the Court evaluated the Debtors' expert witnesses and their opinions, and determined that the testimony of the Debtors' witnesses "was credible and presented a fair and reasonable basis for the determination of the estimated value of the digital assets." (*Id.* at 130:2-8.) These are the same witnesses and methodologies being offered to determine the value of the remaining tokens: MAPS, OXY, SRM, and BOBA.

22. On February 7, 2024, the Court entered the *Order Granting Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. 7090] (the "Order"). Attached to the Order as Exhibit 1 was the Digital Assets Conversion Table, which set forth the values of Digital Assets and fiat currency that are the basis for the estimation of Claims. The Order provided that "certain MAPS, OXY, SRM, and BOBA Digital Assets noted as 'TBD' in the Digital Assets Conversion Table were excluded from [the] Order with all rights reserved (other than the right to assert that estimation should not be conducted with respect to such Digital Assets), and the valuation of such Digital Assets will be addressed by further order of the Court." (Order ¶ 9.)

23. On February 9, 2024, the Court entered the *Order Approving Stipulation and Agreed Scheduling Order* [D.I. 7218], which attached as Exhibit 1 an agreed litigation schedule between the Debtors and the Objectors to address the value of the Deferred Digital Assets (the "Schedule"). In accordance with the Schedule, Maps and Oxy each served on the Debtors an Expert Report of Fotios Konstantinidis (respectively, the "Konstantinidis Maps Report" and "Konstantinidis Oxy Report") on January 26, 2024. On February 9, 2024, the Debtors served the Rebuttal Expert Report of Sabrina T. Howell (the "Feb. 9 Howell Rebuttal"), a copy of which is attached as Exhibit B, and the Response of Kevin Lu to Expert Report of Fotios Konstantinidis (the "Lu Response"), a copy of which is attached as Exhibit C, in response to Mr. Konstantinidis' reports. On February 16, 2024, TMSI served on the Debtors the

Declaration of Ioannis Gkatzimas on Behalf of TMSI SEZC Ltd. (the “Gkatzimas Report”). In response, the Debtors served the Rebuttal Expert Report of Sabrina T. Howell in Response to Ioannis Gkatzimas (the “Feb. 22 Howell Rebuttal”) on February 22, 2024, a copy of which is attached as Exhibit D.

24. Also pursuant to the Schedule, Maps, Oxy and TMSI took the deposition of Professor Howell (the “Howell Dep. Tr.,” cited excerpts of which are attached hereto as Exhibit E) on February 26, 2024, and Maps and Oxy took the deposition of Mr. Lu (the “Lu Dep. Tr.,” cited excerpts of which are attached hereto as Exhibit F) on March 1, 2024. The Debtors took the deposition of Mr. Konstantinidis (the “Konstantinidis Dep. Tr.,” cited excerpts of which are attached hereto as Exhibit G) on February 27, 2024 and the deposition of Mr. Gkatzimas (the “Gkatzimas Dep. Tr.,” cited excerpts of which are attached hereto as Exhibit H) on March 7, 2024. Boba Foundation did not serve any discovery requests or expert reports, designate any witnesses for the upcoming hearing, or participate in the depositions of the Debtors’ experts.

C. The Deferred Digital Assets

i. MAPS and OXY

25. MAPS is the utility and governance token for the Maps.me application. (Feb. 9 Howell Rebuttal ¶ 11.) Maps.me was initially launched by Alex Grebnev and Viktor Mangazeev as an offline map application. Following meetings with Samuel Bankman-Fried and Daniel Friedberg (the former General Counsel and Chief Compliance Office of FTX), Messrs. Grebnev and Mangazeev formally agreed in October 2020 that the FTX group would lead the presale then public offering of MAPS to investors. As part of the agreement, Messrs. Grebnev and Mangazeev executed a series of token purchase, joint venture, and loan agreements entitling Bankman-Fried and Alameda Research LLC’s (“Alameda”) subsidiary, Cottonwood Grove Ltd., to acquire billions of locked and unlocked MAPS at prices as low as \$.00001 per token. The

coordination on the project was evidenced by the fact that Daniel Friedberg commissioned the White Paper for Maps and drafted significant portions of it in October 2020.

26. Maps.me 2.0 was launched in December 2020 with a new, embedded digital wallet which could work with different fiat currencies and had various payment features. (Feb. 9 Howell Rebuttal ¶ 11.) In January 2021, the MAPS token was launched. (*Id.*) MAPS aimed to provide value to holders of the token in three main ways: (i) benefits from Maps.me revenues, (ii) personalized rewards and services, and (iii) governance of Maps.me. (*Id.*) The FTX group and Samuel Bankman-Fried were closely involved in MAPS prepetition. (*Id.* at ¶ 12.) Mr. Bankman-Friend was listed as an “advisor” to the project and promoted MAPS publicly. (*Id.*) In January 2021, Alameda led a \$50 million investment in Maps.me. (*Id.*)

27. OXY is similarly the utility and governance token of the Oxygen Protocol, also founded by Alex Grebnev and Viktor Mangazeev. (*Id.* at ¶ 14.) The Oxygen Protocol aims to provide financial infrastructure in which participants can lend or borrow funds and trade assets. (*Id.*) Similar to MAPS, OXY aimed to provide value to holders of the tokens in three ways: (i) benefits from Oxygen Protocol revenues, (ii) reduced protocol usage fees, and (iii) governance of the Oxygen Protocol. (*Id.*) In February 2021, pursuant to various agreements between Alameda, Mr. Bankman-Fried, and Messrs. Grebnev, and Mangazeev, Alameda led a \$40 million investment round into the Oxygen Protocol with the stated hope of integrating Oxygen into Maps.me. (*Id.* at ¶ 15.) Mr. Bankman-Fried was listed as an advisor to the Oxygen Protocol, as he was for Maps.me. (*Id.*)

28. As of the Petition Date, the Debtors held over 99% of the maximum supply of MAPS, and less than 1% of the maximum supply of MAPS was freely tradeable. (*Id.* at ¶ 12.) Professor Howell estimates that the Debtors’ holdings of MAPS as of the Petition Date

were equivalent to nearly 20,000 times the average daily trading volume. (*Id.* at ¶ 13.) Accordingly, even if one could have sold amounts equal to the average trading volume every single day, it would take approximately 54 years to sell the Debtors' holdings of MAPS. (*Id.*)

29. Similarly, as of the Petition Date, the Debtors held over 97% of the maximum supply of OXY, and less than 1% of the maximum supply of OXY was freely tradeable. (*Id.* at ¶ 15.) Professor Howell estimates that the Debtors' holdings of OXY as of the Petition Date were equivalent to nearly 6,000 times the average daily trading volume. (*Id.*) Accordingly, even if one could have sold amounts equal to the average trading volume every single day, it would take approximately 16 years to sell the Debtors' holdings of OXY. (*Id.*)

ii. SRM

30. The Serum exchange was created by Mr. Bankman-Fried together with his associates at the FTX group. (*Id.* at ¶ 16.) SRM is a utility and governance token for the Serum exchange. (*Id.*) Holders of SRM were provided discounts on trading fees and interest on staked SRM, and participation in Serum revenues. (*Id.* at ¶ 17.) Mr. Bankman-Fried publicly promoted the Serum project, had broad discretion over updates to the SRM protocol, and over the unlocking schedule of SRM for individual holders of SRM on the Debtors' exchanges. (*Id.* at ¶ 18.) As Mr. Gkatzimas acknowledges, "Serum was technically governed as a decentralized autonomous organization . . . , although FTX held the private keys required to make changes to the Serum code." (Gkatzimas Rep. ¶ 17.)

31. As the founders of SRM, the Debtors held over 95% of SRM's maximum supply on the Petition Date, equivalent to nearly 400 times its daily average trading volume. (Feb. 9 Howell Rebuttal ¶ 18.) As of the Petition Date, less than 3% of the maximum supply of SRM was freely tradeable. (*Id.* at ¶ 19.) Following the commencement of these Chapter 11 Case, the Serum exchange became defunct. (*Id.* at ¶ 16.)

iii. Sam Coins

32. As of the Petition Date, the face value of MAPS, OXY and SRM (*i.e.*, based on the Petition Time price without any applicable discount) comprised approximately half of the face value of the Debtors' Digital Asset holdings. (*Id.* at ¶ 10.) This, however, is based on a price that reflects what these Digital Assets could be sold at when less than 1% of MAPS' and OXY's maximum supply was freely tradeable, and less than 3% of SRM's maximum supply was freely tradeable.

33. MAPS, OXY and SRM are explicitly referenced in the November 2, 2022 CoinDesk article often cited as the trigger for the Debtors' spectacular collapse by revealing that so much of Alameda's balance sheet consisted of these tokens with unsupported valuations.⁵ CoinDesk reported that "Alameda's massive holdings of FTT, MAPS and OXY were enough to cast doubt on its solvency and ultimately bring down SBF's entire operation."⁶ The New York Times reported that the "leaked Alameda balance sheet . . . showed the company's assets consisted largely of FTT, Serum, Maps, Oxygen and other cryptocurrencies that would be difficult to convert into cash."⁷ Indeed, dozens of *pro se* objectors to the Motion recognized that MAPS, OXY and SRM are differently situated than other Digital Assets and more akin to FTT.

⁵ Ian Allison, *Divisions in Sam Bankman Fried's Crypto Empire Blur on His Trading Titan Alameda's Balance Sheet*, COINDESK.COM (Nov. 2, 2022), <https://www.coindesk.com/business/2022/11/02/divisions-in-sam-bankman-frieds-crypto-empire-blur-on-his-trading-titan-alamedas-balance-sheet/>.

⁶ Daniel Kuhn, *Sam Bankman-Fried's Wildest, Craziest, Dumbest Trades*, COINDESK.COM (Nov. 7, 2023), <https://www.coindesk.com/consensus-magazine/2023/11/07/sam-bankman-frieds-wildest-craziest-dumbest-trades/>.

⁷ Emily Flitter and David Yaffe-Bellany, *FTX Founder Gamed Markets, Crypto Rivals Say*, NYTIMES.COM (Jan. 18, 2023), <https://www.nytimes.com/2023/01/18/business/ftx-sbf-crypto-markets.html>.

(*See, e.g.*, D.I. 5517.) Accordingly, these tokens are often referred to as “Sam Coins” due to Mr. Bankman-Fried’s “sizable ownership and direct control over the supply.”⁸

REPLY

I. The Court Has Wide Discretion to Determine Appropriate Estimation Methodology.

A. The Court Has Already Ruled That Estimation Is Appropriate.

34. As described above, this Court has already ordered the estimation of Claims based on Digital Assets. The Order provides that the rights of the Objectors are reserved with respect to valuation of the Deferred Digital Assets “*other than the right to assert that estimation should not be conducted.*” (Order ¶ 9.) It is baffling, therefore, that TMSI again argues that estimation is inappropriate. (TMSI Obj. ¶¶ 2, 15.) As the Court concluded at the Hearing, “[s]everal objectors argued that estimation was unnecessary under 502(c) because the value of the claims could be determined through the claim allowance process without undue delay. I disagree.” (Jan. 31, 2024 Hr’g Tr. 130:9-12.) This issue is resolved and TMSI’s objection on that basis is improper and moot.

B. The Filing of a Proof of Claim is Not “*Prima Facie*” Evidence of a Valid Claim in an Estimation Proceeding.

35. Maps takes the position that because it filed proofs of claim that included dollarized values, this constitutes *prima facie* evidence of the validity and amount of such Claims. (Maps Obj. ¶ 32.) Therefore, according to Maps, the Debtors bear the burden of introducing evidence sufficient to rebut such presumption of validity. (*Id.* at ¶¶ 31-32.) This argument is misplaced. While an *objector* to a proof of claim bears the burden of rebutting a presumption of validity (*see, e.g.*, *In re Henry*, 546 B.R. 633, 635 (Bankr. E.D. Pa. 2016)), the

⁸ Daniel Kuhn, *Sam Bankman-Fried’s Wildest, Craziest, Dumbest Trades*, COINDESK.COM (Nov. 7, 2023), <https://www.coindesk.com/consensus-magazine/2023/11/07/sam-bankman-frieds-wildest-craziest-dumbest-trades/>.

Debtors are not objecting to Maps' Claims. Rather, the Debtors are *estimating* Maps' Claims. Maps of course knows this, and in fact contradicts its own assertion when it acknowledges that courts have "adopted a variety of methods to estimate a claim." (Maps Obj. ¶¶ 35-36.) The acceptance by courts of various methods to estimate claims undermines Maps' unsupported contention that the burden is on the Debtors to rebut their asserted claim amounts. Maps' position makes even less sense when considering that, through its Objection, Maps itself is proposing a lower value for its Claims than what it asserted in its proofs of claim.

36. As explained in the Motion and acknowledged by Maps, there is no requirement that a particular kind of procedure be employed in estimating the value of a claim. *See Kool, Mann, Coffee & Co. v. Coffey*, 300 F.3d 340, 356 (3d Cir. 2002). Congress intended estimation to be undertaken initially by bankruptcy judges, using whatever method is best suited to the contingencies at issue. *See Bittner v. Borne Chem. Co., Inc.*, 691 F.2d 134, 135 (3d Cir. 1982). Accordingly, the Court has broad discretion to choose whatever method it deems best-suited to the particular circumstances to estimate the values of Claims based on Digital Assets. *See In re Innovasystems, Inc.*, 2014 WL 7235527, at *7 (Bankr. D.N.J. Dec. 18, 2014) ("There is no particular method to be employed in estimating a claim. Estimation decisions therefore fall within the discretion of the trial judge.") (citations omitted); *In re G-I Holdings, Inc.*, 323 B.R. 583, 599 (Bankr. D.N.J. 2005) ("In general, a bankruptcy court has discretion to determine the appropriate method of estimation in light of the particular circumstances of the bankruptcy case before it."). All that is required is "sufficient evidence on which to base a reasonable estimate of the claim." *Bittner*, 691 F.2d at 135. The Debtors have more than satisfied this requirement with respect to MAPS, OXY, SRM and BOBA.

C. It is Appropriate to Include the Debtors' Holdings When Determining the Value of Digital Assets.

37. As addressed in the Original Reply (¶¶ 33-37) and established at the Hearing, it is appropriate to include the Debtors' holdings when determining the value of the Digital Assets. None of the Objectors has provided any basis to deviate from this methodology with respect to the Deferred Digital Assets.

38. *First*, Maps, Oxy and TMSI argue that the Claims must be valued from the perspective of customers, rather than the Debtors. (Maps Obj. ¶ 45; Oxy Obj. ¶¶ 27-28, 53; TMSI Obj. ¶¶ 16-20.) The Objectors do not even agree how this should be done, with Maps and Oxy seeking to value only their individual claims, while TMSI offers an alternative discount to the Petition Date price of SRM based on *all* customer claims. (*Id.*) Both iterations misstate what the Debtors are doing to estimate Claims based on Digital Assets and why they are doing it.

39. The Debtors' position is that estimation of the value of Claims based on Digital Assets cannot be determined in a vacuum as though no other FTX-related trading would need to occur at the same time. As Professor Howell explained in the Howell Supplemental Declaration, each Digital Asset has a market with a finite amount of liquidity, or ability to absorb sales. (Supp. Howell Decl. ¶ 12.) With a sufficiently large quantity for sale, demand becomes exhausted and further sales are impossible. (*Id.*)

40. Here, contrary to assertions by the Objectors (Oxy Obj. ¶¶ 28-35; TMSI Obj. ¶ 16), it was known from the beginning and in the hypothetical absence of these Chapter 11 Cases that the Debtors lacked the Digital Assets necessary to consider in-kind distributions. (*See* Howell Rep. ¶ 3.) The Objectors' assertions that this was not knowable are easily dismissed. In the days leading up to the Petition Date, certain of the Debtors' affiliates and subsidiaries were seized in other jurisdictions to be liquidated. (*See, e.g., Declaration of John J. Ray III in Support*

of Chapter 11 Petitions and First Day Pleadings [D.I. 24] ¶¶ 42-43.) The week leading up to the Petition Date was a historic “bank run” on the Debtors’ assets and the Debtors began to freeze withdrawals prior to the commencement of the Chapter 11 Cases.⁹ The Debtors early on confirmed the massive hole on the asset side of its balance sheet. Therefore, the Debtors must sell all of the Digital Assets they hold, regardless of whether they are the basis of a Claim, to create U.S. Dollars to distribute on account of Allowed Claims. That process is advancing as authorized by the Court pursuant to the Digital Assets Sale Order and the IMA Order.

41. Accordingly, since the Debtors on the Petition Date needed to monetize their entire holdings of Digital Assets, the price that any particular customer could obtain from the sale of a claimed Digital Asset would necessarily be impacted by both (i) sales by other customers of the Debtors and (ii) sales by the Debtors. To do otherwise would be fundamentally unfair to creditors. Were the Debtors to ignore the market impact from liquidating their Digital Assets holdings for the Digital Assets, or assume that the Digital Assets that are the basis of Claims could be liquidated first, the result would be a shortfall in asset sale proceeds that would have to be borne by other creditors. (Howell Suppl. Decl. ¶ 13.) The creditors who would bear the brunt of this shortfall (*i.e.*, higher discounts) would be those holding *more liquid* assets that the Debtors did not hold in sufficient quantities, while the creditors who would benefit would be those holding the more illiquid assets. (*Id.*) Because the Debtors must liquidate their holdings, a liquidation discount is unavoidable. Forcing all creditors to share ratably in a loss due to the sale of particular and identifiable Digital Assets would be unfair and inequitable.

⁹ *FTX Suspends Addition of New Clients, Withdrawals*, REUTERS.COM (Nov. 10, 2022)
<https://www.reuters.com/technology/ftx-suspends-onboarding-new-clients-2022-11-10/>.

42. The illogicality of any other methodology is demonstrated by Maps' and Oxy's expert, Mr. Konstantinidis. (*See also* Oxy Obj. ¶¶ 40-41.) As discussed in further detail below, Mr. Konstantinidis attempts to value the Claims based on MAPS, OXY, and SRM held by his clients in isolation, and does so by assuming *each* claimant could sell up to 10% of the daily trading volume of a Digital Asset into the market without price impact. The result is that Mr. Konstantinidis assumes that his clients—who are not the only customers claiming MAPS and OXY—could *each* sell 10% of the daily trading volume of MAPS and OXY into the market every single day for *years* with no price impact whatsoever. This already doesn't make sense, but makes even less sense when considering that there are *thousands* of unique customers with Claims based on MAPS and OXY. Assuming that *each* of those customers could sell up to 10% of the average daily trading volume simultaneously (in other words, magnitudes above the average daily volume) every day for years without price impact would not yield a true assessment of the value of the Digital Asset. All of the Digital Assets being sold must be taken into account, even when determining value from the customers' perspective.

43. Oxy's other arguments are inapposite. (Oxy Obj. ¶¶ 36-39.) Section 506(a) is inapplicable here, as pricing for the Digital Assets Conversion Table assumes that Customer Entitlement Claims are not secured. (*See* Order ¶ 4.) To the extent Oxy is suggesting that *In re Oakwood Homes* prohibits the application of discounts based on the Debtors' holdings, that reading is flawed. *See* 449 F.3d 588 (3d Cir. 2006). The court there found that discounting to present value is not *required* by section 502(b) of the Bankruptcy Code, but specifically noted that it was not holding that 502(b) "never authorizes discounting a claim." *Id.* at 598. And in any event, *Oakwood Homes* applies to claims determined under section 502(b), not estimated under section 502(c). Finally, Oxy's comparison of the Debtors' Plan to a stockbroker

liquidation is both irrelevant and does not support its argument. This is not, in fact, either a chapter 7 liquidation or a stockbroker liquidation, and any governing law with respect to stockbroker liquidations is not applicable here. Moreover, as discussed above, the Debtors *are* estimating Claims based on what could be realized from the liquation of the Deferred Digital Assets into the market given the actual circumstances. Oxy's assertion that "the fact that certain securities cannot be liquidated . . . is irrelevant in determining a customer's claim" besides having no application is misplaced. The legislative history "states that 'regardless of the actual dates, if any, of liquidation, the customer is only entitled to the liquidation value at the time of filing of the petition [and] the value of a security on which trading has been suspended at the time of the filing of the petition will be estimated.'" COLLIER ON BANKRUPTCY ¶ 748.02. The quote cited by Oxy thus stands for the entirely uncontroversial proposition that a debtor's inability to in fact liquidate a security postpetition is not itself determinative of a creditor claim.

II. The Debtors' Experts Are Qualified Under Federal Rule of Evidence 702 and Otherwise.

44. In order for expert testimony to be admissible under Federal Rule of Evidence 702, the expert "must be qualified to express an expert opinion." Fed. R. Evid. 702. The Third Circuit interprets this requirement "liberally." *Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003). A "broad range of knowledge, skills, and training" will suffice to qualify an expert, *Pineda v. Ford Motor Co.*, 520 F.3d 237, 244 (3d Cir. 2008) (citation omitted), including "[p]ractical experience" in the industry about which the expert is testifying, *Hammond v. Int'l Harvester Co.*, 691 F.2d 646, 653 (3d Cir. 1982). Courts in this Circuit have repeatedly "eschewed imposing . . . overly rigorous requirements of expertise" and have, instead, "been satisfied with more generalized qualifications." *In re Paoli*, 35 F.3d 717, 741 (2d Cir. 1994); *see also Pineda*, 520 F.3d at 245 ("[I]t is an abuse of discretion to exclude testimony simply because

. . . the proposed expert does not have the specialization that the court considers most appropriate").

A. Professor Howell is Well Qualified.

i. Professor Howell Has Extensive Qualifications to Offer an Opinion on the Valuation of Digital Assets.

45. There can be no doubt that Professor Howell far exceeds the “liberal” standard for expert qualification. She holds a B.A. in Economics from Yale University, an M.A. in Economics from Harvard University, and a Ph.D. in the Political Economy & Government Program, Economics Track from Harvard University. (*See Howell Rep. ¶ 8; App’x A.*) As part of her course work for those degrees, she studied valuation. (Howell Dep. Tr. 10:7-8.)

46. She is currently an Associate Professor of Finance at the New York University Stern School of Business, one of the most highly-regarded business schools in the country. (*See Howell Rep., App’x A.*) She also currently serves as a Research Associate at the National Bureau of Economic Research and a Research Fellow at the Institute for Private Capital. (*See Howell Rep. ¶ 5.*) Her research and teaching focus on entrepreneurial finance, fintech and private equity, among others. (*Id.*) At NYU Stern, Professor Howell created and teaches a course on financial technology, a large portion of which is devoted to cryptocurrency markets. (*Id. at ¶ 6.*) She has received awards for her teaching and research, including being named a Poets & Quants Best 40-Under-40 MBA Professor in 2023 and winning the AQR Asset Management Institute Young Researcher Award in 2021, as well as the Kauffman Foundation Junior Faculty Research Fellowship in 2017. (*Id. at ¶ 7.*)

47. Professor Howell’s work has been published in some of the most prestigious journals in their respective fields. Her 2020 paper, “Initial Coin Offerings: Financing Growth With Cryptocurrency Token Sales,” is the single most highly cited paper in financial

economics on ICOs. (*Id.* at ¶ 5.) In addition to publishing herself, she has served and is serving as an Associate Editor of multiple academic journals of financial economics. (*Id.* at ¶ 9.) In preparing her report, she also worked extensively with Analysis Group, one of the foremost economic and financial consulting firms in the world.

ii. Maps' Attacks on Professor Howell's Qualifications Are Unsupported.

48. Without actually moving to exclude her testimony on this basis in the Objection, Maps inappropriately offers conjecture that Professor Howell is unqualified to offer her opinions. (See Maps Obj. ¶¶ 54-59.) These arguments are unconvincing and easily dismissed. As discussed above, Professor Howell is, without question, a highly qualified economist with extensive understanding of the crypto economy. That is sufficient for her to be a qualified expert in this Circuit. In fact, the Court has already accepted Professor Howell's expert testimony and opinions in these Chapter 11 Cases with respect to every one of the Debtors' Digital Assets with only the Deferred Digital Assets remaining. (See Jan. 31, 2024 Hr'g Tr. 130:2-8.) Maps has not offered any reason to deviate from this finding solely with respect to MAPS, OXY and SRM.

iii. TMSI's Attempt to Re-characterize the Issue on Which Professor Howell is Opining Fails.

49. TMSI's assertion that Professor Howell's "testimony regarding perpetual futures markets should be stricken and excluded because she is not qualified to offer her opinion that the volume in the SRM perpetual futures markets is irrelevant to the price impact of selling spot SRM positions" (TMSI Obj. ¶ 23) also has no merit. While Professor Howell is well-versed in futures markets, she is being offered as an expert on the valuation of Digital Assets and the discounts she is applying in her opinions. Her opinion as to whether the perpetual futures market is appropriately considered as "trading volume" for the purpose of calculating an Asset

Liquidation Discount for SRM is squarely within her expertise. (*See generally* Feb. 22 Howell Rebuttal.)

50. In an attempt to avoid this obvious conclusion, TMSI re-characterizes the issue on which Professor Howell opines as “perpetual futures trading strategies,” and then attacks her qualifications to opine on this manufactured issue. (TMSI Obj. ¶ 23.) But Professor Howell need not be an expert on “perpetual futures trading strategies” in order to opine on whether it is appropriate to include the perpetual futures market volumes in the KO (as defined below) model, on which Professor Howell actually opines. Professor Howell is an economist, and she is opining on and testifying as to, among other things, the discount to be applied to determine the value of SRM. One need not be a perpetual futures trader to opine on what should and should not be considered in a valuation model.¹⁰

B. Mr. Lu is Well Qualified.

- i. Mr. Lu’s Professional Experience in Data and Pricing Digital Assets is Extensive.

51. Mr. Lu is similarly qualified under the Third Circuit’s standard. He has a B.A. in Economics from the University of California, Berkeley and has 15 years of experience in performing analyses using applications of data science to financial data. (Lu Decl. ¶¶ 2-3.) He

¹⁰ TMSI also argues that Professor Howell’s testimony should be excluded because the Feb. 22 Howell Rebuttal “did not conduct any quantitative analysis” and “simply identified risks.” (*See* TMSI Obj. ¶ 29.) This assertion is both inaccurate and misunderstands the role of a rebuttal expert. Professor Howell thoroughly explained her opinion as to why SRM cannot be liquidated into the perpetual futures market and, in any event, in her capacity as a rebuttal expert to Mr. Gkatzimas, Professor Howell’s role is “solely to contradict or rebut evidence” offered by the opposing expert. Fed. R. Civ. P. 26(a)(2)(D)(ii). When acting as a rebuttal expert, Professor Howell has “no burden to produce models or methods of [her] own.” *Winn-Dixie Stores, Inc. v. E. Mushroom Mktg. Coop.*, 2021 WL 2352016, at *14 (E.D. Pa. June 9, 2021); *see also APEX Fin. Options, LLC v. Gilbertson*, 2022 WL 613347, at *3 (D. Del. Mar. 1, 2022) (“Because [he] is a rebuttal expert . . . he was not required to offer a competing . . . analysis, but was entitled simply to ‘explain, repel, counteract or disprove evidence of the adverse party.’”). It is clear that TMSI simply disagrees with Professor Howell’s opinion. This, of course, is an impermissible basis to exclude her testimony under Federal Rule of Evidence 702. *See, e.g., MiCs & Partners, Inc. v. Funai Elec. Co.*, 2017 WL 6268072, at *6 (D. Del. Dec. 7, 2017) (plaintiff’s objections to expert’s “analytical approach” and “erroneous[] assum[ptions]” go to weight, not admissibility).

has worked in positions where he has conducted econometric and statistical analyses in connection with litigation, performed analyses using applications of data science, finance and economics for corporations, and created and maintained economic and financial data sets for use by his former firm's systematic trading systems. (*Id.* at ¶¶ 4-6.) In several of his prior positions he regularly interacted with pricing-related datasets. (*Id.* at ¶¶ 6-7.)

52. Mr. Lu has worked at Coin Metrics for the past five years as the Director of Data Science & Product. (*Id.* at ¶¶ 1, 8.)¹¹ “Coin Metrics serves a user base consisting of established financial institutions and companies engaged in the digital assets industry” (Lu Resp. ¶ 13) and its prices are “widely used within the industry” (Lu Decl. ¶ 15). These “clients use the Coin Metrics Prices for research, for accounting and financial reporting, to settle financial contracts, to create financial products, for display purposes, and to publish on-chain via blockchain oracles.” (*Id.*)

53. In his position, Mr. Lu played a key role in the development of the Coin Metrics Prices, including evolving it from inception into an established commercial offering. (*Id.* at ¶ 8.) As part of this process, Mr. Lu “extensively reviewed the financial pricing literature within both the digital assets industry and the traditional financial assets industry.” (*Id.*) He also “conducted extensive backtesting of multiple pricing methodologies and [has] first-hand experience in observing how pricing methodologies perform during times of market stress.” (*Id.*) On a daily basis, Mr. Lu or others working at his direction “perform[] routine examinations on the performance of the Coin Metrics Prices,” and he regularly investigates and responds to price challenges and questions raised by Coin Metrics’ users, including exchanges, custodians

¹¹ Notably, five years of experience specifically in the cryptocurrency industry is significant, given the industry’s relative infancy.

and asset managers. (*Id.* at ¶ 9.) Additionally, Mr. Lu is Chairperson of the Coin Metrics Oversight Committee and is responsible for “maintaining the integrity” of the Coin Metrics Prices. (*Id.*)

ii. Maps’ Attacks on Mr. Lu’s Qualifications Are Unsupportable.

54. Again, while Maps posits that Mr. Lu “lacks proper qualifications” for his opinions, Maps does not in its Objection or otherwise move to exclude Mr. Lu under Federal Rule of Evidence 702. (Maps Obj. ¶¶ 49-53.)¹² Instead, Maps invents alleged procedural deficiencies that it points to as disqualifying. (*Id.*) There are no such deficiencies and no basis to seriously question Mr. Lu’s qualifications.

55. *First*, Maps’ contention that Mr. Lu is somehow not qualified because his initial opinion was submitted in declaration form rather than as an expert report is easily dismissed. (Maps Obj. ¶ 49.) All of the requirements of Federal Rule of Civil Procedure 26(a)(2) were satisfied. Maps had the opportunity, and in fact did, request further information in discovery regarding Mr. Lu’s compensation, background and publications, all of which the Debtors provided. *Second*, that Mr. Lu noted at his deposition that he was unsure as a legal matter whether he was being offered as an expert witness is also irrelevant (*id.*); a witness is not the arbiter of how their testimony is used by the party that is offering it. *Third*, Maps’ ad hominem allegations of “potential conflicts of interest” likewise miss the mark. (*Id.* at ¶¶ 51-53.) Maps has offered no evidence that Coin Metrics or Mr. Lu is conflicted, or that Mr. Lu is not in compliance with Coin Metrics’ conflicts policy.

¹² Maps’ assertion that the Debtors “did not ask the Court to consider Mr. Lu as an expert witness at the prior hearing” is wrong. (Maps Obj. ¶ 49.) The Debtors referred to Mr. Lu repeatedly throughout the hearing as an expert, and the Court acknowledged that “the Debtors presented the testimony of . . . two experts.” (Jan. 31, 2024 Hr’g Tr. 130:2-3). Other Objectors recognized as well that Mr. Lu was being presented as an expert. (*Id.* 109:10-11 (Oxy’s counsel referring to Mr. Lu’s report as an “expert report”).)

III. The Baseline Prices Determined by Mr. Lu Are Reasonable and Reliable.

56. Mr. Lu determined the baseline prices for the Digital Assets at the Petition Time by, first, selecting high quality constituent markets for each Digital Asset, and second, applying statistical techniques to calculate its price. (Lu Decl. ¶ 31.) The same process was used for the Deferred Digital Assets as for all of the Debtors' other Digital Assets priced by Coin Metrics.

57. The first step—the selection of high quality constituent markets—is critical to the determination of reliable prices for the Deferred Digital Assets. As Mr. Lu explains, “trading in cryptocurrencies can occur at several hundred centralized or decentralized exchanges.” (*Id.* at ¶ 34.) Some of these “exchanges engage in deceptive practices to manipulate their reported trading activity, such as facilitating or engaging in trades between the same party to artificially boost price, liquidity or interest (known as wash trading).” (*Id.*) To address this issue, Mr. Lu assessed exchanges’ transparency, resilience & security, data quality, regulatory compliance and API quality to identify a set of “trusted exchanges.” (*Id.* at ¶ 35.) From these, where available, Mr. Lu generated constituent and candidate markets for each Relevant Digital Asset. (*Id.* at ¶¶ 41-45.) “These are markets that are unlikely to engage in wash trading, have large volume, [and] are unlikely to have outliers.” (Lu Dep. Tr. 65:16-21.) Mr. Lu’s methodology therefore ensures that the exchange(s) used to calculate the Petition Time price for each Digital Asset were minimally affected by non-economic transactions, fake volume or outlier data.

58. Following his selection of the appropriate constituent markets, Mr. Lu calculated the price using a weighted-median approach, with weights derived from the 60-minutes immediately preceding the Petition Time. (Lu Decl. ¶ 46.) Mr. Lu used a weighted-median approach because it is less susceptible to outliers, flash crashes and suspected

manipulation than a weighted-average approach. (Lu Dep. Tr. 133:12-19.) The 60-minute calculation window was based on a robust sensitivity analysis, with 60 minutes being selected after a determination that it struck “the appropriate balance between timeliness, accuracy, and manipulation-resistance.” (Lu Resp. ¶¶ 20-22.)

59. The results of these steps and Mr. Lu’s analysis are baseline prices that the Debtors submit most accurately reflect the market prices for the Deferred Digital Assets at the Petition Time.

60. None of the criticisms lodged by Maps or Oxy undermine Mr. Lu’s methodologies.¹³ First, Maps’ and Oxy’s assertions that Mr. Lu’s methodology excludes relevant exchanges are irrelevant to the ultimate outcome for MAPS and OXY and, in any event, unpersuasive. (See Maps Obj. ¶¶ 60-64; Oxy Obj. ¶ 65.) Their inclusion would result in minor adjustments that would have *no impact* on the ultimate result with respect to MAPS and OXY. As discussed below, the asset liquidation discounts applicable to MAPS and OXY are 100% (even when using alternative datasets suggested by Maps and Oxy for volume). Accordingly, the value of Claims based on MAPS and OXY is zero regardless of the baseline price.

61. Moreover, Mr. Lu’s exclusion of exchanges that are not trustworthy is appropriate. As explained above, many exchanges engage in wash trading or other methods to generate fake volume. Contrary to Maps’ assertion, Mr. Lu’s opinion that such excluded exchanges are untrustworthy is not arbitrary or solely based on a single article. (Maps Obj. ¶¶ 62-63, 69-71.) Mr. Lu testified at his deposition that he also “reviewed the academic literature of other researchers that have studied this same topic and just by the fact of working full-time in the industry for the past five years and regularly interacting with other folks that work within the

¹³ TMSI does not object to Mr. Lu’s methodology or baseline price for SRM.

industry, it's [his] opinion that most sophisticated practitioners understand that [wash trading] is occurring." (Lu Dep. Tr. 60:6-14.)¹⁴ That Mr. Lu relies on Coin Metrics' commercial framework to determine relevant exchanges is also no reason to doubt his methodologies.¹⁵ As noted above, Mr. Lu himself assisted in developing those methodologies and his current responsibilities include examinations of the performance of Coin Metrics Prices—which are widely relied on by sophisticated market participants—and maintenance of their integrity. (*See supra* ¶ 53.)

62. *Second*, Maps misunderstands Mr. Lu's application of the Trusted Exchange Framework in his determination of the baseline Petition Time prices. (Maps Obj. ¶¶ 65-67.) Mr. Lu did not "ignore the overall grade" and "look[] only to the first category, data quality, to decide if an exchange was trustworthy or not." (*Id.* at ¶ 66.) Rather, as explained in the Lu Declaration, Mr. Lu detected "significant spreads between prices on FTX and prices on the trusted exchanges during the time window immediately preceding the and at the Petition Time." (Lu Decl. ¶ 41.) Accordingly, Mr. Lu instituted a hierarchy of exchanges in order to ensure that FTX exchanges would only be selected as a last resort. This involved relying only on the data quality score to select candidate markets "based on the principle of preferring to select markets on the trusted exchanges . . . then preferring to select markets on low-rated exchanges if a particular digital asset does not trade on the trusted exchanges, and minimizing the selection of markets on FTX, to the extent possible." (*Id.* at ¶ 42.) Once the candidate markets were

¹⁴ Maps also argues that "the underlying data from the exchanges, and how, if at all, Mr. Lu or Coin Metrics manipulated that data . . . was not disclosed in discovery." (Maps Obj. ¶ 70.) This is wrong; the Debtors produced the source code underlying the Trusted Exchange Framework.

¹⁵ Maps' puzzling assertion that Mr. Lu should use an outdated version of his methodology because the current version was not in place as of the Petition Date makes no sense. (Maps Obj. ¶ 64.) An expert should of course utilize the most reliable methods, regardless of when they became available. Mr. Lu also testified at his deposition that the sample data in the utilized version of the framework included data as of the Petition Date. (Lu Dep. Tr. 100:12-24.)

generated using this step, Mr. Lu relied on the overall score of the Trusted Exchange Framework to select the constituent markets. (*Id.* at ¶ 45.) This hierarchy of exchanges is not utilized in the Coin Metrics Prices because there is no reason to use it; it was only instituted for this specific assignment because of the issues identified by Mr. Lu with respect to pricing on the FTX exchanges.

63. *Third*, Maps' argument that Mr. Lu's confidence interval is "misleading" is both without merit and beside the point. (Maps Obj. ¶¶ 72-77.) Maps' critique of Mr. Lu's calculation relies on *Maps'* biased view of what exchanges should be included; not what exchanges were *actually* included by Mr. Lu. In any event, the confidence interval played no role in Professor Howell's analysis or the discounts she calculated.

IV. Professor Howell's Methodologies and the Resulting Discounts Are Reasonable and Reliable.

64. Professor Howell's assignment was to assist with determining the value of creditor Claims associated with Digital Assets by evaluating the likely effect of liquidating the Debtors' holdings of each of their 1,321 unique Digital Assets claimed by creditors as of the Petition Time. Specifically, her analysis included determining (i) the discount, if any, at which the Debtors would have been able to sell their holdings of each Digital Asset or fiat currency in an orderly liquidation commencing at the Petition Time (an "Asset Liquidation Discount"), and (ii) the discount (the "DLOM") that would have applied to Digital Assets that were not marketable (*e.g.*, "locked"). (Howell Rep. ¶ 4.) This analysis included each of the Deferred Digital Assets.

65. Professor Howell applied this methodology across *all* 1,321 Digital Assets and fiat currencies she was asked to assess. It resulted in application of an Asset Liquidation Discount to 71 Digital Assets and DLOM to the locked versions of 13 Digital Assets. (*See*

Howell Rep., Exs. 3-4.) Professor Howell ascribed a value of zero to an additional 84 Digital Assets that had stale pricing. (*Id.* at ¶ 19 n.10.) The Court previously accepted this methodology, and its output values, for all of the other Digital Assets. (*See Order, Ex. 1.*) In an attempt to siphon off value at the expense of other creditors, Maps, Oxy and TMSI now argue that the methodology with respect to MAPS, OXY, SRM, and the “custom” and “locked” versions of those tokens is unreliable for various reasons. None of these arguments hold water.

A. Professor Howell’s Asset Liquidation Discounts Are Reasonable.

66. In her Report, Professor Howell adopted and applied the model put forward by Kyle and Obizhaeva (“KO”) in their 2016 paper *Market Microstructure Invariance: Empirical Hypotheses*, as a uniform methodology for assessing the appropriate liquidation discount for the Digital Assets. (Howell Rep. ¶ 68 (citing Albert S. Kyle & Anna A. Obizhaeva, *Market Microstructure Invariance: Empirical Hypotheses*, 84 ECONOMETRICA 1345 (2016)).) The KO model estimates the cost of liquidating a position in an asset over time. (Howell Rep. ¶ 68). The KO model is premised on the basic idea that when a large position in an asset is being liquidated into the market, this puts downward pressure on the price of the asset. (*Id.*) The KO model represents this downward pressure by calculating the “price impact cost” and “bid-ask spread cost” of the liquidation, which together represent what KO refer to as a “transaction cost” and what Professor Howell referred to as the Asset Liquidation Discount. (*Id.*)

67. The size of the position to be liquidated is critical to the analysis. As Professor Howell explains, “[a]n asset liquidation discount depends not only on the liquidity of the underlying market, but also on the size of the position that is being liquidated. Given the same level of market illiquidity, liquidating a larger position will generally entail a larger discount.” (*Id.* at ¶ 64.) The size of the market into which the position is being liquidated is also critical because “[a]verage daily volume in normal times is often used as a benchmark to gauge

the size of the transaction the market can absorb” before liquidation becomes costly. (*Id.*) In other words, when the average daily trading volume of a particular asset is higher, more of that asset can be liquidated into the market on a daily basis without incurring large costs, resulting in a lower Asset Liquidation Discount. For this reason, the overwhelming majority of Maps’, Oxy’s, and TMSI’s criticisms of Professor Howell’s methodology for calculating the Asset Liquidation Discount is focused on trying, in a self-serving manner, to (i) increase the volume attributable to the applicable Deferred Digital Asset to absorb liquidation and (ii) decrease the amount of the Deferred Digital Asset to be liquidated, both to reduce the Asset Liquidation Discount. None have merit.

i. Professor Howell’s Use of the KO Model is Well-Founded.

68. Professor Howell selected the KO model after considering several alternatives, including the square root model, the Amihud (2002) model, and the Keim and Madhavan model. (Howell Dep. Tr. 56:16-23.) Professor Howell utilized the KO model “because it is based on rigorous economic theory and because in [her] view it is likely applicable to digital asset markets.” (Howell Rep. ¶ 69.) In fact, Professor Howell determined that “[c]ertain features of cryptocurrency markets, such as small tick sizes, competitive market-makers, low transaction fees, and minimal taxes, imply that the KO model may in fact be more applicable to cryptocurrency markets than to some of the settings where KO posit that their method applies.” (*Id.*) KO themselves indicate that the model is appropriate “for a wide range of assets” because it “is based on general principles.” (*Id.* at ¶ 69.) Professor Howell also tested KO’s invariance hypothesis herself “to the best extent possible” on cryptocurrency data, and “found results to be broadly consistent.” (Howell Dep. Tr. 75:12-15.)

69. In the Feb. 9 Howell Rebuttal, Professor Howell further noted that KO have “characterized the KO model as ‘a universal formula for market impact,’ and argued that

‘the spirit of [the KO model] suggests that institutional details related to market structure, information asymmetries, or motivation of traders should not affect market impact estimates much.’” (Feb. 9 Howell Rebuttal ¶ 39 (quoting Albert S. Kyle and Anna A. Obizhaeva, *Large Bets and Stock Market Crashes*, 27 R. FIN. 2163 (2023) (“KO 2023”)).) The model has also been successfully applied in contexts with substantially different time periods and substantially different market structures. (*Id.*). Finally, at least one article has already tested the KO model in cryptocurrency markets, and found it to “characterize[] liquidity well.” (Feb. 9 Howell Rebuttal ¶ 39 (citing Alexander Brauneis, et al., *How to Measure the Liquidity of Cryptocurrency Markets?*, 124 J. BANKING & FIN., 1 (2021) (“Brauneis, et al.”)).)

70. Maps’ and Oxy’s assertions that the KO model is not applicable to cryptocurrencies fail.¹⁶ As an initial matter, that the KO model has “never been applied to value cryptocurrency” (Maps Obj. ¶ 42) is of no relevance: as explained above, KO, Brauneis, et al. and Professor Howell all verified its broader application. Maps and Oxy also argue that that the findings of Brauneis, et al. are inapplicable because Brauneis, et al. determined that the KO model “is unable to track liquidity across high volatility periods.” (Maps Obj. ¶ 79; Oxy Obj. ¶ 59.) But this criticism is exactly why Professor Howell chose an estimation period (described below) that *excluded* the outlier high volatility periods. (See Howell Dep. Tr. 66:24-67:10; 68:20-25.) Moreover, Professor Howell was not tasked with characterizing the time series dynamics of liquidity for the Digital Assets; rather, she estimated the *level* of liquidity. Brauneis, et al. found that “the KO model characterizes liquidity well in cryptocurrency markets.” (Feb. 9 Howell Rebuttal ¶ 39.)

¹⁶ Mr. Gkatzimas does not dispute Professor Howell’s use of the KO model and uses the same model in his analysis. (See generally Gkatzimas Rep.)

71. Oxy further argues that Professor Howell's use of the KO model is inappropriate because it calculates "transaction costs" rather than a "discount," as used by Professor Howell. (Oxy Obj. ¶ 44.) As Professor Howell testified at her deposition, this is simply semantics. The "transaction cost" is expressed by the KO model as a "percent of the [petition date] price." (Howell Dep. Tr. 46:20-21.) A percentage reduction in per-unit price is a discount. (*Id.* at 46:5-8 ("Q. So are transaction costs and the discount identical? A. Yes. They are different words for the same percent of price.").)

72. Maps' contention that the "slow trading strategy" of the KO model is inapplicable to cryptocurrency also has no basis. In support of this argument, Maps simply points to Mr. Konstantinidis' reference to a few large trades that took place where the price did not drop to zero. (Maps Obj. ¶ 81 (citing Konstantinidis Maps Rep. ¶ 33).) But these are all *single* trades that took place on a *single* day. They are therefore completely irrelevant to the liquidation of MAPS, OXY and SRM, which would involve multiple trades and take years. Moreover, Mr. Konstantinidis' "dribble out" method is similarly a slow trading strategy simply by another name.

73. Finally, Maps and Oxy both argue that the KO model is inherently flawed because it produced Asset Liquidation Discounts of over 100% for MAPS and OXY. (Maps Obj. ¶¶ 82-85; Oxy Obj. ¶¶ 48-52.) Not so.¹⁷ The KO model only resulted in Asset Liquidation Discounts of over 100% for a handful of tokens out of the 1,321 that Professor Howell analyzed. In other words, the model correctly produces extraordinary discounts where there are extraordinary circumstances, such as in the case of MAPS and OXY. As Professor Howell

¹⁷ Notably, the literature cited by Maps and Oxy as questioning discounts of over 100% all refer to discounts for lack of marketability, not asset liquidation discounts. (See Maps Obj. ¶¶ 83-84; Oxy Obj. ¶¶ 48-51.)

testified, “with extreme volatility . . . and these extraordinarily large holdings relative to daily trading volume that would not plausibly exist in a normal market, environment . . . it is natural that the formula would produce a discount of over a hundred percent. . . . It does not mean that the formula is incorrect in any way.” (Howell Dep. Tr. 49:12-24.)

74. In any event, this argument is irrelevant to the ultimate outcome. Professor Howell demonstrated what the Asset Liquidation Discount would be for each of MAPS, OXY and SRM using seven other models. (Feb. 9 Howell Rebuttal ¶ 43.) *Every single model* produced an Asset Liquidation Discount of 100% for MAPS and OXY, and all but one produced a 100% Asset Liquidation Discount for SRM—far higher than Professor Howell calculated using the KO model. (*Id.* at Fig. 5.)¹⁸ This demonstrates that Professor Howell’s calculations are, if anything, conservative.

ii. Professor Howell’s Inputs and Assumptions to the KO Model are Appropriate.

75. In order to determine the Asset Liquidation Discount, the KO model relies on (i) the volatility of the Digital Asset, (ii) its average daily trading volume, (iii) the amount of the Digital Asset to be liquidated and (iv) the Petition Time price of the Digital Asset. (Howell Rep., App’x C. ¶¶ 17-22.) The data, inputs and assumptions used by Professor Howell were reasonable and reliable.

76. *First*, Professor Howell assumed, in accordance with her assignment, that the Debtors would be selling all of their holdings of the Digital Assets in an orderly liquidation commencing on the Petition Date. Assertions that Professor Howell should have made other

¹⁸ The only Asset Liquidation Discount using *any* other model for any of the Deferred Digital Assets less than 100% was 54% for SRM, very close to the 58% calculated by Professor Howell using the KO model.

assumptions are easily dismissed.¹⁹ For example, Maps and Oxy assert that Professor Howell should have considered alternative trading strategies, such as the burning or destroying of tokens in order to increase the value of the remaining supply. (Maps Obj. ¶ 92 n.8; Oxy Obj. ¶ 42 n.9.) There is no basis for the Objectors to speculate as to the Debtors' trading strategies, and they have offered no evidence in this regard. (*See* Konstantinidis Dep. Tr. 16:8-20.)

77. *Second*, Professor Howell used the period of November 2, 2021 to November 1, 2022 as the “estimation period” for volatility and volume. This assumption correctly excludes the substantially increased period of volatility from November 2, 2022 (the date the CoinDesk article which discussed the composition of Alameda’s balance sheet was published) through the Petition Date. (Howell Rep., App’x C ¶ 18.) Professor Howell also used a long estimation period to reduce estimation errors, which are more likely when a shorter period is used. (*Id.*)

78. *Third*, Professor Howell used reliable data for volume and Petition Time prices received from Coin Metrics. Professor Howell used all of the historical data available from Coin Metrics for volume, excluding three exchanges she determined to be unreliable: LBank, ZB.com and LocalBitcoins. (Howell Rep. ¶ 70.) For the Petition Time prices, she utilized the prices calculated by Mr. Lu and as set forth in the Lu Declaration.²⁰

79. Oxy challenges Professor Howell’s reliance on Coin Metrics’ data, arguing that it excludes other exchanges on which trading of MAPS and OXY occurred, and that her exclusion of LBank, ZB.com and LocalBitcoins was arbitrary. (Oxy Obj. ¶¶ 61-64; *see also*

¹⁹ See *supra* ¶¶ 37-43 for the discussion as to the inclusion of the Debtors’ holdings in such orderly liquidation.

²⁰ Oxy’s (¶¶ 57-58) and TMSI’s (TMSI Obj. ¶ 20) assertions that Professor Howell did not consider whether the Asset Liquidation Discount for the Deferred Digital Assets was already priced into their Petition Time prices is belied by their own experts. Mr. Konstantinidis affirmed at his deposition that it was “[c]orrect” that he was “not suggesting that there’s any basis to value any of Maps, Oxy or Serum at the spot price on the petition date.” (Konstantinidis Dep. Tr. 48: 4-8.) Mr. Gkatzimas also proposes an Asset Liquidation Discount for SRM.

Maps Obj. ¶ 105.) This is baseless and, once again, irrelevant to the outcome for MAPS and OXY. For the reasons discussed above, reliance on Coin Metrics' data was appropriate given the prevalence of fake volume and wash trading on other exchanges that are included in data produced by data aggregators that do not impose such rigorous safeguards. (*See supra* ¶¶ 56-61.) And with respect to Professor Howell's limited exclusions, LBank and ZB.com were excluded because Professor Howell "confirmed unreasonable trading activity on those . . . exchanges." (Howell Dep. Tr. 181:5-7.)²¹ Mr. Lu also testified that "[i]n Coin Metrics' experience of maintaining our data feeds with exchanges over the past five years, we've determined that there are several instances where the data reported from ZB.com and LBank is clearly erroneous. We've seen specific examples where volume has spiked by a factor of 8,000 which suggests to us that the data is completely wrong." (Lu Dep. Tr. 141:7-16.) Neither Oxy nor Mr. Konstantinidis has provided any evidence that these conclusions by Professor Howell or Mr. Lu are incorrect.

80. Moreover, to evaluate any impact with respect to the Deferred Digital Assets, Professor Howell performed her analysis using data from the three data aggregators suggested by Mr. Konstantinidis: CoinMarketCap, CoinGecko and Coinpaprika. (Feb. 9 Howell Rebuttal ¶ 33). "Despite relying on trading volume estimates that are likely inflated," the Asset Liquidation Discount for MAPS and OXY remained at 100%, while the Asset Liquidation Discount for SRM ranged from 42% (CoinMarketCap and CoinGecko) to 64% (Coinpaprika)—which bookend Professor Howell's Asset Liquidation Discount rate of approximately 58%. (*Id.*)

²¹ Of the Deferred Digital Assets, LBank listed only MAPS, ZB.com listed only SRM, and LocalBitcoins did not list any of them.

iii. Professor Howell Properly Excluded Perpetual Futures Markets Volumes From Her Dataset.

81. In determining Asset Liquidation Discounts, Professor Howell made the determination to only include the spot market for each Digital Asset when examining the volume into which the Digital Asset would be liquidated. (Howell Dep. Tr. 141:16-142:10.) This makes sense, as a spot token can only be sold into the spot market. Indeed, this is likely why neither Maps nor Oxy object to this aspect of Professor Howell's methodology.

82. TMSI, however, argues that Professor Howell's failure to include the perpetual futures market in her trading volume input that represents the market into which the asset will be liquidated renders her application of the KO model inaccurate. (TMSI Obj. ¶¶ 30-41.) This argument fails for several reasons. *First*, such an approach would require spot and perpetual futures markets to be perfectly integrated across a multitude of exchanges, which neither Mr. Gkatzimas nor TMSI has established. (*See* Howell Dep. Tr. 140:15-141:1.) In fact, over objections, the Court *already priced* FTX-issued SRM-PERP for estimation purposes in the Digital Assets Conversion Table (*see* Order Ex. 1); it is therefore clear that SRM and SRM-PERP are completely separate instruments.

83. *Second*, as explained by Professor Howell in the Feb. 22 Howell Rebuttal, “[p]erpetual futures cannot be used for liquidating assets.” (Feb. 22 Howell Rebuttal ¶ 21.) Even in the transactions described in the TMSI Objection, Mr. Gkatzimas acknowledged that “in the context of a trading strategy, it requires two steps.” (Gkatzimas Dep. Tr. 51:14-15.) In order to use the perpetual futures market to liquidate SRM, the Debtors would need to first open the perpetual futures contract and then, “when they want to fully exit, they would unwind that.” (*Id.* at 52:6-11.) The Debtors would need to “close the futures . . . and they would sell the remaining tokens in the spot market.” (*Id.* at 52:12-17.) In other words, Mr. Gkatzimas' and TMSI's

proposed trading strategy *still requires* selling the token into the spot market. That additional liquidity could, in theory, be generated by hedging prior to that sale is beside the point for the purposes of valuing the underlying asset. And it is particularly irrelevant for determining what *volume* input should be used in the KO model.²² The bottom line is that in order to liquidate a spot token, all parties agree that the asset must ultimately be sold into the *spot* market for such spot token. Professor Howell's exclusion of other markets—like the perpetual futures market—from the volume inputs of the KO model was appropriate.²³

iv. The Results of the KO Model with Respect to MAPS, SRM and OXY are Accurate and Reliable.

84. Professor Howell's application of the KO model results in discounts of 100% for MAPS and OXY and 58.3% for SRM. With respect to MAPS and OXY, Professor Howell confirmed at her deposition that "the share of tokens that could be sold at a positive price is so small as to be negligible" and would "round down to zero in a meaningful approximation." (Howell Dep. Tr. 58:14-16; 218:17-25.) Notwithstanding this, Maps and Oxy each incorrectly insist that there must be some positive value to MAPS and OXY. (See Maps Obj. ¶¶ 86-89; Oxy Obj. ¶ 46.)

85. Rather egregiously, Maps asserts that Professor Howell "cannot rule out that the Debtors could sell as much as \$100 million worth of MAPS and OXY before the price

²² TMSI's assertion that KO "do in fact include futures liquidity in calculating average daily trading volume" is misleading. (TMSI Obj. ¶ 32 n.9.) This was done in a separate paper and for the purposes of an entirely separate trading strategy. (See Howell Dep. Tr. 137:11-22) (noting that they are modeling "an adjustment of price exposure," which is not the purpose of the current exercise).

²³ Mr. Gkatzimas also incorrectly applied his critique to the KO model. If someone were to assume (wrongly) that spot tokens can be liquidated into the perpetual futures market, one must then also combine the spot tokens with the perpetual futures as the liquidation amount. By failing to do so, Mr. Gkatzimas incorrectly assumes that trades of perpetual futures are costless and effectively undercounts the Asset Liquidation Discount. As discussed above, Mr. Gkatzimas' analysis suffers from the further flaw that it improperly reduces the number of SRM tokens to be liquidated as solely customer holdings of SRM, rather than the Debtors' holdings.

went to zero.” (Maps Obj. ¶ 88.) This is a blatant misrepresentation of Professor Howell’s testimony. When asked “at what point does the price go to zero,” Professor Howell testified that her “analysis suggests that the overall proceeds to the estate would be negligible and essentially rounding to zero.” (Howell Dep. Tr. 61:4-12.) She repeatedly and correctly stated that she had not done the analysis to determine exactly at what point the price would go to zero. (*Id.* at 59:18-20; 61:15-21.) Notwithstanding that Professor Howell repeatedly stated that she had not done the analysis, counsel to Maps badgered her by asking if it would be more or less than \$1 million, \$5 million, \$20 million, \$25 million or \$100 million worth of MAPS or OXY before the price would go to zero, in response to which Professor Howell again stated that she did not conduct any such analysis. (*Id.* at 61:15-21.) She also correctly stated that it would depend on market expectations because “once the market knows that the debtor is starting [a] liquidation process, there would be an interplay between that information and actual sales that would determine when the price would exactly go to zero.” (*Id.* at 60:6-25.) She did not suggest that \$100 million of MAPS or OXY could be sold before the price went to zero. To the contrary, Professor Howell was clear that the price would go to zero “very quickly” and the number of tokens that could be sold at a positive value “would be so small as to round down to zero in a meaningful approximation.” (*Id.* at 218:10-25.) Thus, there is no reason to deviate from Professor Howell’s result of a 100% Asset Liquidation Discount rate for MAPS and OXY.

B. Professor Howell’s DLOMs are Reasonable.

i. Professor Howell’s DLOM Methodology is Reliable.

86. With respect to non-marketable assets, which could not be sold by the customer on the Petition Date, Professor Howell adopted a simulation-based methodology to the model by Finnerty (2012) and Ghaidarov (2009) to determine the appropriate DLOM. (Howell Rep. ¶ 76.) That “locked tokens are worth less than unlocked tokens . . . is not in dispute.”

(Maps Obj. ¶ 94.) The DLOM proposed by Professor Howell attempts to quantify this undisputed discount by measuring “opportunity cost of holding a non-marketable asset.” (Howell Rep. ¶ 73.) Specifically, Professor Howell utilizes a DLOM which “increases with (i) the length of the non-marketability period; and (ii) the volatility of the underlying asset’s value.” (*Id.* at ¶ 74.)

ii. Professor Howell’s Application of an Asset Liquidation Discount and DLOM to MAPS, OXY and SRM is Appropriate.

87. Rather than taking issue with Professor Howell’s DLOM itself, Maps objects to her use of a DLOM in conjunction with the Asset Liquidation Discount. (Maps Obj. ¶¶ 93-95.) Notably, TMSI does not object to the application of Professor Howell’s DLOM to its custom SRM tokens. (*See* Initial TMSI Obj. ¶ 11 n.10.) Also notably, the application of a DLOM to MAPS and OXY is, in many ways, meaningless because the estimated value of Claims based on those tokens is zero applying only the Asset Liquidation Discount. Further, pursuant to the Order and the Digital Assets Conversion Table, the Court has already approved the application of both an Asset Liquidation Discount and DLOM with respect to several Digital Assets.

88. In any event, Professor Howell’s application of a DLOM is reasonable. In her application of the DLOM, Professor Howell performed a two-step process to determine the value of non-marketable tokens with corollaries to marketable assets. First, she “unlocked” all of the tokens, “which is implemented by applying the DLOM to the Petition Time price of the tokens.” (Feb. 9 Howell Rebuttal ¶ 45.) Second, she liquidated the now-fully unlocked population of tokens, which is implemented by applying the Asset Liquidation Discount “to the Petition Time price for unlocked tokens and to the DLOM-adjusted Petition Time price for non-marketable tokens.” (*Id.*)

89. Maps argues that Professor Howell's approach, which she applies across all non-marketable tokens, is "double discounting." (Maps Obj. ¶¶ 93-95; *see also* Oxy Obj. ¶ 55.) Specifically, Maps argues that, "[i]f the tokens are unlocked as of the Petition Date, then no discount for lack of marketability can apply: there is no 'opportunity cost of holding a non-marketable asset' if the tokens are unlocked." (*Id.* at ¶ 95 (quoting Howell Rep. ¶ 73).) Maps misunderstands the tokens at issue. The non-marketable tokens are locked from the *customer* perspective and would have been released to the customer only pursuant to a vesting schedule. This is similar to how an employee's restricted stock units may be granted: while the employee does not get access to such RSUs other than subject to the vesting schedule, the company could redistribute those RSUs to other employees if the original employee were to leave the company. It is reasonable to assign less value to a Claim based on a Digital Asset not yet granted to that customer than to a Claim based on a token available in a customer account as of the Petition Date. Professor Howell's application of the DLOM is appropriate.

V. No Party Has Provided A Viable Alternative to the Debtors' Proposed Values for MAPS, OXY or SRM.

A. Mr. Konstantinidis Is Not Qualified.

90. Mr. Konstantinidis lacks even basic qualifications to opine on the valuation of the Deferred Digital Assets and the discount rates to be applied. Mr. Konstantinidis' educational background is in physics, chemical engineering and computer science. (*See* Konstantinidis Maps Rep., Ex. B.) He has no educational degrees or other professional certifications or licensing in finance, valuation or economics. (Konstantinidis Dep. Tr. 19:24-20:22.) Prior to his current role, which he only assumed in August of 2019, Mr. Konstantinidis did *no* work performing asset valuation and had no experience with application of asset

discounts. (*Id.* at 21:3-10.) His only arguably relevant experience is digital asset valuation for tax and financial reporting purposes—neither of which are relevant here. (*Id.* at 23:20-24:14.)

91. The Debtors recognize that this is a bench hearing and are therefore not moving to exclude his opinions and testimony under Federal Rule of Evidence 702. The Debtors submit, however, that the Court should give no weight to Mr. Konstantinidis' opinions given his lack of qualifications and relevant experience. Furthermore, the opinions and analysis he offers fail to address the issue before the Court, and are fatally flawed.

B. Mr. Konstantinidis Does Not Provide Values That Can Be Used to Estimate Claims.

92. Mr. Konstantinidis fails to provide values for MAPS, OXY and SRM that could be used as the basis to estimate relevant Claims. This Court determined at the Hearing to estimate Claims based on Digital Assets. When counsel for Maps and Oxy argued that the Debtors needed to adhere to the traditional claims objection process, the Court was clear: “[t]his isn’t a claims adjudication process. It’s an estimation process.” (Jan. 31, 2024 Hr’g Tr. 97:17-18.) The Court specifically rejected the argument that estimation is not necessary under section 502(c) (*id.* at 130:9-12) and entered the Order approving the Motion and estimating Claims (*see* Order ¶¶ 1-2).

93. Yet, Mr. Konstantinidis does not offer any value for MAPS, OXY or SRM that can be used to estimate Claims, nor does he offer a discount applicable to all creditors asserting Claims based on any of the Deferred Digital Assets. Instead, Mr. Konstantinidis purports to value the specific Claims of his clients. (*See generally* Konstantinidis Maps Report; Konstantinidis Oxy Report.) Mr. Konstantinidis testified at his deposition that the scope of his assignment was limited to purporting to value each of his client’s individual holdings of MAPS, OXY, and SRM. (Konstantinidis Dep. Tr. 32:3-33:12.) Mr. Konstantinidis does not offer an

opinion on the value of MAPS, OXY, or SRM that would be applicable to any other creditor in these Chapter 11 Cases. (*Id.* at 51:4-9.) Furthermore, Mr. Konstantinidis has, by design, sought to value each of his client's holdings in the Deferred Digital Assets individually and therefore arrived at different values for the same token for his different clients. (*Id.* at 53:8-13; Konstantinidis Oxy Rep. ¶¶ 24-25; Konstantinidis Maps Rep. ¶¶ 49-50.) Mr. Konstantinidis acknowledges that if adopted, his methodology would require the Debtors to calculate a unique discount and price for each and every creditor asserting claims based on MAPS, OXY or SRM. (Konstantinidis Dep. Tr. 53:14-23.)

94. Faced with this reality, Oxy posits with no evidence that "it should be straightforward to expand the approach to determine the value of Claims for all other holders of MAPS and OXY tokens as of the Petition Date." (Oxy Obj. ¶ 81.) Not true. Oxy further speculates that it could "be possible to implement a flat discount to the Petition Date price that would be applicable to Claims below a certain threshold of units." (*Id.* at ¶ 82.) Oxy misses the point: the Court has already determined—after overruling its objection—that the claims of *all* creditors must be estimated and not individually adjudicated, and that needs to be done on an omnibus basis pursuant to the Digital Assets Conversion Table given the number of Claims. Mr. Konstantinidis does not even attempt to do so.

C. Mr. Konstantinidis' Methodology is Fundamentally Flawed.

95. The modest analysis Mr. Konstantinidis' did do is fatally flawed. Mr. Konstantinidis' analysis is plainly focused on artificially increasing average trading volume and the amount of the relevant Deferred Digital Asset that could theoretically be liquidated into the market purportedly without price impact, in order to drive down the Asset Liquidation Discount. His methods and assumptions are unreasonable.

i. Mr. Konstantinidis' Methodology Incorrectly Applies an Unsupported and Arbitrary Assumption Regarding How Much of a Digital Asset Can Be Liquidated Into the Market Without Price Impact.

96. In assigning values to the Claims of each of Maps, Oxygen Vault Limited, Fondation Elements and Fondation Serendipity that are based on MAPS, OXY and SRM as of the Petition Time, Mr. Konstantinidis makes the unsupported assumption that one could liquidate 10% of the average daily trading volume of a token into the market without negatively impacting price. (Konstantinidis Maps Rep. ¶ 42.)²⁴ Remarkably, Mr. Konstantinidis asserts that there cannot be *any* price impact *at all* so long as no more than 10% of the average daily trading volume of each of MAPS, OXY and SRM is sold into the market every day. (Konstantinidis Dep. Tr. 72:21-25 (“Q. In your view, with respect to the market for Maps, Oxy and Serum, could there be some price impact above zero at the 10 percent trading level? A. No.”).) Mr. Konstantinidis cites no source in either the Konstantinidis Maps Report or the Konstantinidis Oxy Report for this assumption. (*Id.* at 72:14-20.) Rather, he vaguely relies on “other competitors of Stout[] . . . using it” and it having been used “for tax purposes.” (*Id.* at 74:22-75:8.) This unsupported assumption is contrary to the KO model (*see* Feb. 9 Howell Rebuttal ¶ 66) and academic literature (*see, e.g.*, KO 2023 at 2192 (“Even in highly liquid markets and even if quantities traded are restricted to 5% or 10% of daily volume, execution of large bets may lead to significant price changes.”)).

97. Not only is Mr. Konstantinidis’ 10% assumption unsupported, he applies it in a contradictory and absurd fashion. Mr. Konstantinidis makes this assumption for *each* of the “subject block of tokens”—meaning, for each of the four client portfolios he was tasked with

²⁴ In asserting that this “dribble out” or “blockage” method is credible, Maps and Oxy can only point to its use in U.S. tax court proceedings—plainly inapplicable to the current facts. (*See* Maps Obj. ¶ 101; Oxy Obj. ¶ 75.)

valuing. (Konstantinidis Maps Rep. ¶ 42; Konstantinidis Oxy Rep. ¶ 17.) In other words, Mr. Konstantinidis assumes that each of Oxygen Vault Limited, Fondation Elements and Fondation Serendipity can sell 10% of the average daily trading volume of OXY *simultaneously* (or, 30% of the average daily trading volume) with no price impact. Indeed, he testified that if he had 50 clients, each of them could sell 10% of the average daily trading volume under his analysis simultaneously with no assumed price impact. (Konstantinidis Dep. Tr. 76:25-77:9.) This, of course, makes no sense, as such sales would result in 500 times the average daily trading volume being liquidated into the market without price impact. This is both illogical and contrary to Mr. Konstantinidis' own opinion, which is that "anything over 10 percent will potentially have a price impact." (*Id.* at 73:5-7; *see also* 73:8-14.) Mr. Konstantinidis' only explanation for this application of his assumption is that each "portfolio's isolated," a plainly results-driven assumption. (*Id.* at 77:4-5.)

ii. Mr. Konstantinidis Uses Unreliable Trading Data and an Arbitrary Estimation Period as the Basis for His Volume Assumptions.

98. Where Professor Howell relied on Coin Metrics' curated set of exchanges for her volume assumptions, Mr. Konstantinidis simply collected his volume data from CoinMarketCap, a data aggregator, with no further analysis. (Konstantinidis Maps Rep. ¶ 45; Konstantinidis Oxy Rep. ¶ 20.) This in and of itself is unreliable. A study conducted by Bitwise Asset Management, Inc. and submitted to the United States Securities and Exchange Commission (the "Bitwise Study") concluded that "the volume numbers reported by CoinMarketCap.com (and other data aggregators in the space) are surprising because they are wrong, wildly inflated by a combination of fake volume and wash trading that dramatically

skews the public’s view of the bitcoin market in a negative way.”²⁵ Referring specifically to CoinMarketCap’s reported volume, the Bitwise Study noted that “\$10.5 billion out of the \$11 billion in reported average daily spot bitcoin volume, or roughly 95% of all reported volume, is either fake volume or wash-trading.” *Id.* at 35. While CoinMarketCap did take responsive steps following the publication of this study, Mr. Lu opined that these changes “represent[] the most cursory attempt at addressing the fake volume problem.” (Lu Resp. ¶ 10 n.8; *see also* Lu Dep. Tr. 149:11-150:5.)

99. Mr. Konstantinidis also appears to misunderstand what is actually included in the volume data on which he relies. At his deposition, Mr. Konstantinidis testified that CoinMarketCap “takes all these measures . . . to detect fake volume or incorrect pricing” then “cleans out the data, and that’s what it reports.” (Konstantinidis Dep. Tr. 107:8-15.) This is incorrect. CoinMarketCap may have taken steps intended to help identify and remove exchanges that permit zero fee trading and trading incentives, but it still includes many exchanges with significant wash trading and fake volume concerns. (*See* Lu Resp. ¶ 10 n.8 (“CoinMarketCap . . . will still include exchanges where its own confidence in the legitimacy of the reported volume is low to moderate”); Lu Dep. Tr. 150:13-19.)

100. Mr. Konstantinidis also used an arbitrary estimation period from which to determine average daily trading volume. While Professor Howell used a one-year period to reduce potential error and outliers (*see* Howell Rep., App’x C ¶ 18), Mr. Konstantinidis used only the 24-hour period prior to the Petition Time (*see* Konstantinidis Maps Rep. ¶ 45). This

²⁵ “Economic and Non-Economic Trading in Bitcoin: Exploring the Real Spot Market For The World’s First Digital Commodity”, Bitwise Asset Management, *available at* <https://www.sec.gov/comments/sr-nysearca-2019-01/srnysearca201901-5574233-185408.pdf>, at 8.

period, of course, was marked by extraordinary volatility in the cryptocurrency markets and higher volumes than is typical. (*See* Feb. 9 Howell Rebuttal, Exs. 5A-5C.)

101. The result of Mr. Konstantinidis' reliance on this volume data source and estimation period is a baseline volume assumption that is wildly out of touch with reality, resulting in assumptions regarding the baseline daily trading volume of MAPS, OXY and SRM that is significantly higher than the average daily trading volume over the year prior to the Petition Date. (*See* Feb. 9 Howell Rebuttal, Exs. 6A-6C.) The use of volume assumptions so clearly untethered to *actual* average trading volume is a plainly baseless and results-driven methodological choice.

iii. There Is No Basis for Mr. Konstantinidis' Volume Growth Projections.

102. On top of his inflated baseline volume data, Mr. Konstantinidis also makes unsupportable predictions regarding future volume growth for MAPS, OXY and SRM. Incredibly, Mr. Konstantinidis predicts that average daily trading volume will increase by over 850% in the first year following the Petition Date for each of MAPS and OXY, and over 20% for SRM. (*See* Feb. 9 Howell Rebuttal, Fig. 8.)

103. Mr. Konstantinidis' basis for these projected increases in average daily trading volume is ostensibly “[v]olume trends from 20 cryptocurrencies that are available in the Ethereum blockchain, were active for the last 5 years, were not stablecoins, and had average daily volume in USD between \$1 million - \$30 million.” (Konstantinidis Maps Rep. ¶ 46.) Mr. Konstantinidis took the average of the volume growth of these cryptocurrencies over 5 years and

applied those averages to MAPS, OXY and SRM. (Konstantinidis Dep. Tr. 89:3-15.)²⁶ This is unreliable for several reasons.

104. As an initial matter, the tokens selected by Mr. Konstantinidis do not in fact fall into the criteria he described. For example, PAXG and XAUT are stablecoins.²⁷ Moreover, Mr. Konstantinidis provides no explanation as to why the volume growth of these 20 cryptocurrencies has anything to do with the potential volume growth of MAPS, OXY and SRM. Mr. Konstantinidis did no analysis as to whether any of these 20 cryptocurrencies “had any ties to FTX or Alameda,” (Konstantinidis Dep. Tr. 85:23-86:5) or “into the qualitative events that might have been at issue for those tokens” (*Id.* at 88:6-21). It is therefore unclear on what basis Mr. Konstantinidis assumed the volume growth of MAPS, OXY or SRM would track the volume growth of these cryptocurrencies.

105. Further, Mr. Konstantinidis arbitrarily selected the average rather than median growth rate. Despite conceding that the median was a more plausible 150% for the first year for his “peer” cryptocurrencies (*Id.* at 89:16-90:6), Mr. Konstantinidis selected the average simply because he “did want to include everything.” (*Id.* at 90:11-24.) The application of such a large growth rate allowed Mr. Konstantinidis to assume liquidation of his clients’ holdings of MAPS, OXY and SRM would take only 4 to 5 years. (*Id.* at 93:12-19.) If Mr. Konstantinidis were to have used the median rather than the average growth rate, his estimated liquidation would have taken “somewhere between 20, 30 years.” (*Id.* at 94:5-20.) Of course, a fast volume growth that allows for a quicker liquidation results in a lower liquidation discount rate to Maps’

²⁶ Curiously, this is only the case where the average projected volume was *positive*. Where the average growth rate of the 20 cryptocurrencies was *negative*, Mr. Konstantinidis estimated a 0% growth rate for MAPS, OXY and SRM without explanation.

²⁷ Charles Cascarilla, PaxGold White Paper (Sep. 5, 2019), available at <https://paxos.com/wp-content/uploads/2019/09/PAX-Gold-Whitepaper.pdf>; Tether Gold – A Digital Token Back by Physical Gold (Jan. 28, 2022), available at <https://gold.tether.to/Tether%20Gold%20Whitepaper.pdf>.

and Oxy's benefit. The unavoidable conclusion that must be drawn from these inputs and assumptions is that Mr. Konstantinidis performed an unsupportable and results-driven analysis that should be given no weight by the Court.

VI. The Initial Boba Objection Must Be Overruled.

106. Boba Foundation filed the Initial Boba Objection in January and did not file a supplemental response or objection. Nearly all of the arguments raised in the Initial Boba Objection have already been overruled at the Hearing. For example, Boba Foundation asserts estimation is not appropriate because its Claims are not unliquidated and that estimation should be limited to solicitation and voting only. (Initial Boba Obj. ¶¶ 34, 48-50.) These Objections were overruled at the Hearing and pursuant to the Order. (*See* Jan. 31, 2024 Hr'g Tr. 130:22-131:1; Order ¶ 2.) Boba Foundation's arguments regarding whether Digital Assets constitute customer property are also not at issue with respect to the Motion. (*See* Order ¶ 4 ("Nothing in the Motion or this Order constitutes a ruling or finding of fact regarding whether any Digital Assets, including NFTs, or fiat currency are property of the Debtors' estates, and all parties' rights in this regard are expressly reserved.").) And Boba Foundation's arguments that the Debtors are not authorized to sell BOBA are plainly incorrect. (*See generally* Digital Assets Sale Order.)

107. The only objection contained in the Initial Boba Objection that has not already been overruled, responded to, or rendered moot is its demand for time and discovery. (Initial Boba Obj. ¶¶ 54-55.) In response to this, the Debtors agreed to defer the valuation of the BOBA token (along with MAPS, OXY and SRM), and Boba Foundation is a party to the Schedule. However, Boba Foundation did not serve discovery requests or an expert report on the Debtors, did not identify any witnesses for the upcoming hearing by the deadline to do so, and did not participate in any of the depositions of the Debtors' experts. Boba Foundation has

offered neither any alternative value for the BOBA token nor any evidentiary basis to contest the value proposed by the Debtors. Its Objection should be overruled.

CONCLUSION

For the reasons stated above, the Court should overrule the Objections and grant the Motion with respect to MAPS, OXY, SRM and BOBA, and enter the Supplemental Order, attached hereto as Exhibit A.

Dated: March 17, 2024
Wilmington, Delaware

LANDIS RATH & COBB LLP

/s/ Kimberly A. Brown
Adam G. Landis (No. 3407)
Kimberly A. Brown (No. 5138)
Matthew R. Pierce (No. 5946)
919 Market Street, Suite 1800
Wilmington, Delaware 19801
Telephone: (302) 467-4400
Facsimile: (302) 467-4450
E-mail: landis@lrclaw.com
brown@lrclaw.com
pierce@lrclaw.com

-and-

SULLIVAN & CROMWELL LLP

Andrew G. Dietderich (admitted *pro hac vice*)
James L. Bromley (admitted *pro hac vice*)
Brian D. Glueckstein (admitted *pro hac vice*)
Alexa J. Kranzley (admitted *pro hac vice*)
125 Broad Street
New York, New York 10004
Telephone: (212) 558-4000
Facsimile: (212) 558-3588
E-mail: dietdericha@sullcrom.com
bromleyj@sullcrom.com
gluecksteinb@sullcrom.com
kranzleya@sullcrom.com

Counsel for the Debtors and Debtors-in-Possession